# Environmental Education STATE SYMPOSIUM

February 27-28, 2015 | Baton Rouge Marriott | 5500 Hilton Avenue, Baton Rouge



HOSTED BY:









Dear Friends and Colleagues,

Welcome to the 18th Annual Louisiana Environmental Education Symposium. This year's theme, Biodiversity in Our World, is a celebration of the amazing variety of living things in the world around us, and a reminder that we must be vigilant in our actions — as educators, stewards, and as users of natural resources — to preserve the abundance that we enjoy. Five Friday short courses and a wide variety of Saturday concurrent sessions offer formal and non-formal educators of all levels the opportunity to interact with knowledgeable, energetic presenters, learn innovative techniques and connect with other environmental education professionals from around Louisiana and surrounding states.

Attendees will also enjoy unlimited networking opportunities with exhibitors from various environmental organizations and agencies and learn how these entities benefit your educational endeavors. In addition, please take a moment to learn more about what the Louisiana Environmental Education Commission can do for you. The commission offers professional development, grant opportunities and the chance for students to exhibit creativity through the Environmental Awareness Art and Language Arts Contests. The commission will provide a booth where members will be eager to provide additional information. While you are enjoying the exhibits, help us thank our sponsors, Shell Exploration and Production Company, the Barataria-Terrebonne National Estuary Program, and Friends of Black Bayou, Inc. We also encourage you to attend the meeting of our co-host and sponsor, the Louisiana Environmental Education Association, scheduled to take place during the Saturday lunch in Salons I & II.

I would like to thank the presenters, exhibitors, sponsors, volunteers, and members of the LEEC, whose hard work and devotion impart a special quality to the symposium. Special thanks are in order for our keynote speaker, Dr. Robert A. Thomas, professor at Loyola and award-winning environmental communicator. I am sure each of us will benefit from Dr. Thomas's wealth of experience and deep commitment to environmental education.

Finally, I am so pleased to head the Louisiana Environmental Education Commission this year. As you may or may not know, we are a body of representatives from local, state and federal agencies, along with industry and stakeholder groups committed to providing a variety of resources and opportunities for environmental educators across Louisiana. Please take a moment to seek us out at the conference and let us know how we can help you carry out the important task of educating Louisianans about each individual's role in conserving, protecting and replenishing our natural resources.

Sincerely,

Cole B. Ruckstuhl, Chair

Louisiana Environmental Education Commission

#### 2015 Louisiana Environmental Education Commission

Board of Elementary & Secondary Education Judith Miranti, Ph.D.

Board of Regents Nancy Rabalais, Ph.D.

LA Department of Agriculture & Forestry Wade Dubea

LA Department of Education Ann Wilson

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*LA Department of Health & Hospitals* Gary Balsamo, DVM

LA Department of Natural Resources Kelley Templet

LA Department of Wildlife & Fisheries Angela Capello Environmental Advocacy
Jonathan Dearbone

Environmental Advocacy
Brenda Walkenhorst — Chair Elect

Environmental Scientist Deepak Bhatnagar

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District 1 — Dinah Maygarden — Secretary

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District 4 — Connie Conner District 5 — Melanie Dupre

District 6 — Dianne Lindstedt At Large —Heather Egger LA Science Teachers Association Brenda Nixon, Ph.D. — Past Chair

LSU Agricultural Center Mindy Brooks

Southern University Leodrey Williams, Ph.D.

LEEC Coordinator Venise Ortego

LEEC Assistant Coordinator Thomas Gresham

# Thank you, symposium sponsors.





# Friends of Black Bayou, Inc.

Hosted by:







# SYMPOSIUM Agenda

#### Friday, February 27, 2015

8:00 a.m. - 3:30 p.m.\* Short Courses and Tours (Listed Below) \*Times may vary.

5:00 p.m. - 8:00 p.m. Registration — Foyer

6:00 p.m. - 8:00 p.m. Evening Mixer / Meet the Exhibitors — Salons III & IV

Audubon Bug Tasting — Salons III & IV

Poster Session — Foyer

7:30 p.m. - 8:00 p.m. Baton Rouge Playmakers Preview Performance of

The Planet Earth Show —Salons I & II

#### Saturday, February 28, 2015

7:00 a.m. - 8:00 a.m. Registration/Continental Breakfast 7:30 a.m. - 2:00 p.m. Exhibit Hall Open — Salons III & IV

8:00 a.m - 8:50 a.m. Concurrent Sessions

9:00 a.m. - 10:00 a.m. Keynote & Recognitions —Salons I & II

10:00 a.m. - 11:50 a.m. Concurrent Sessions

12:00 p.m. - 12:30 p.m. Exhibitor Showcase —Salons III & IV Lunch & LEEA Meeting —Salons I & II

1:30 p.m. - 2:20 p.m. Concurrent Sessions

2:20 p.m. Grand Door Prize—Salons I & II

### **Friday Short Course Sessions**

LDWF FISHING IN SCHOOLS: Promoting Education Through Fishing

Grade Levels: 5-12 Location: Waddill Refuge

Presenters: Betsy Seals and Alayna McGarry

#### **EXPLORE THE BIODIVERSITY IN LOUISIANA'S WETLANDS**

Grade Levels: K-12

Location: Southeast Louisiana Refuges Complex, Lacombe Presenters: MattiLynn Delatte and David Stoughton

#### **WETLAND ANIMALS OF LOUISIANA**

Grade Levels: K-8

Location: Hilltop Arboretum

Presenters: Mindy Brooks, Debbie Dornier and Catherine Myrick

#### **BIODIVERSITY CONNECTIONS**

Grade Levels: 5-12

Location: BREC's Bluebonnet Swamp Nature Area

Presenter: Dianne Lindstedt

#### **EXPERIENCE LOUISIANA'S NATURAL HERITAGE**

Grade Levels: K-12 Location: LSU Campus

Presenters: Jim LaCour, Michael Seymour and Louisiana Natural Heritage Program Staff

Your recycled RPET symposium bag folds neatly into its own pocket, so you can keep it in your bag, pocket or glove compartment.

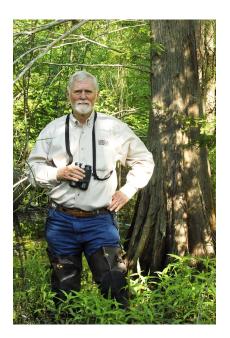
Reuse it!

# **KEYNOTE Speaker**

Dr. Robert A. Thomas is an academician, a business/environmental community liaison, a media source for environmental news, and a family man. He was Founding Director of the Louisiana Nature Center, where he served as the liaison for the community in information pertaining to science education, environmental issues, and natural history.

Dr. Thomas is professor of Mass Communication, holds the Loyola Chair in Environmental Communication, is adjunct professor of Biological Sciences, sits on the Environmental Sciences Faculty, and is the Founding Director of the Center for Environmental Communication at Loyola University New Orleans. He is the recipient of the 2011 Dux Academicus award at Loyola.

Dr. Thomas received his Ph.D. in Vertebrate Zoology from Texas A&M University and has held adjunct professorships at the University of New Orleans, Tulane University, and Louisiana State University. He is the past President of the Association of Nature Center Administrators and is a member/chair of several academic, business, and civic boards (such as the Louisiana Children's Museum, New Orleans Botanical Gardens Foundation, and Louisiana Master Naturalists of Greater New Orleans) and committees. He served on the Accreditation Commission of the American Association of Museums and as Chair of the Environmental Advisory Committee for the Strategic Petroleum Reserve.



The top two honors accorded nature center administrators have been received by Dr. Thomas: The Elsie Naumburg Award (1983, Natural Science for Youth Foundation) and the Professional Leadership Award (2001, the Association for Nature Center Administrators). He was also named Conservation Educator of the Year (1986, Louisiana Wildlife Federation), awarded the Margaret Douglas Medal for Conservation Education (1994, The Garden Club of America), and named Diplomat of the Year (New Orleans Diplomacy Council, 2008).

Dr. Thomas's activities at Loyola include an active teaching program in environmental communication and biology, many activities relating to coastal issues communication, working in the realm of environmental intervention where industry and communities collide, environmental communication programs in tropical areas (principally Belize, Trinidad, Guatemala, and the eastern Caribbean), nature-based tourism, and environmental education and landscaping.

He has published many papers in the fields of herpetology (reptiles and amphibians; specializing in the Neotropical snake fauna) and nature center administration. As mentioned, his most avid interests are in environmental communication, restoring America's WETLAND (Louisiana's coastal wetlands), tropical natural history/interpretation, and nature center-based environmental education. Along with his wife and other colleagues in the Department of Special Education and Habilitative Services at the University of New Orleans, Bob has contributed actively in the field of curriculum development for environmental education.

Bob fervently believes that environmental solutions will be the result of open and honest communication, coupled with trust and integrity, among stakeholders.

#### Keep up with us! Join our weekly eNewsletter list.

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<u>LouisianaEnvironmentalEducationCommission</u>

# **POSTER Session Showcase**

**Dinah Maygarden**, UNO & Ben Franklin HS students Parker Greenwood, Rebecca Horowitz, Olivia Mipro, Aaron Perles, Newell Schindler and Yuzhi Wang — *Rx for the Coast: High school student-driven research projects investigating coastal topics*This NOAA-BWET funded partnership with Ben Franklin High School in New Orleans has introduced hundreds of students at three schools to coastal science, resulting in approximately 50 student-driven research projects investigating questions on coastal topics. Four projects will be highlighted in the symposium poster session.

#### LEEC RESEARCH GRANT RECIPIENTS

Warwick Allen, LSU — Diversity and impact of foliar fungi associated with native and introduced Phragmites australis genotypes We cultured foliar fungi (pathogens and endophytes) isolated from 19 total sites of native and introduced genotypes of Phragmites australis (common reed/Roseau cane) in Louisiana and California. Overall disease severity of pathogenic fungi was also determined by quantifying the percent of leaf area displaying disease symptoms. Diversity and disease severity was compared between P. australis genotypes and geographic locations.

Kaci Fisher, LSU AgCenter — Comparison of trace metal content of two rivers with different land uses in southern Louisiana

This research is based out of the School of Renewable Natural Resources at LSU and is partially funded by the LEEC University Grant. Trace metal content of the industrial-influenced Calcasieu River near Lake Charles is compared to the Atchafalaya River, which is surrounded by forested wetlands.

**Songjie He**, LSU AgCenter — Nutrient inputs from three coastal rivers in southwest Louisiana to the summer hypoxic zone of the Northern Gulf of Mexico

My research program is founded by National Fish and Wildlife Foundation to study nutrient inputs from three coastal rivers in southwest Louisiana to the northern Gulf of Mexico. The LEEC proposal funded a new, robust field laptop that was used to achieve the research goals and objectives.

**Andrew Laughlin**, Tulane — Combining deuterium and strontium isotopes to infer breeding origin of migratory birds: a case study with Tree Swallows wintering along the northern Gulf Coast

Isotope analysis can help us infer the breeding origins of migratory animals captured on their wintering grounds because animals incorporate environmental isotopes into their newly grown tissues. I am combining two isotopes to infer the breeding region of Tree Swallows captured in Louisiana and Florida in order to better understand the migratory connectivity of this abundant (but declining) species.

**Kathleen Munley**, LSU — From Salinity to Behavior: The Effect of Osmotic Stress on GABA production in the mummichog, Fundulus heteroclitus

Estuarine animals exhibit complex physiological and behavioral mechanisms to tolerate or acclimate to perturbations in environmental salinity. Estuaries exhibit highly variable conditions on a regular basis, and these conditions are expected to increase in magnitude and frequency via global climate change, posing unknown future risks to estuarine animal populations. This study assessed the effect of osmotic stress on the expression, activity, and concentration of key metabolites in GABA production in *Fundulus heteroclitus*.

**John Young**, LSU — *Investigation of Potentially Hazardous Fine Particulate Matter in Homes: Designing a Particle Filtration System*Research is focused on design and construction of a particle filtration system to isolate and collect fine particulate matter from homes for testing for associated pollutants. These pollutants include environmentally persistent free radicals, metals and polycyclic aromatic hydrocarbons. My focus is on proof of concept of system for size based particulate segregation and testing.

#### BUY A PLATE TO EDUCATE

Purchase Louisiana's "ENVIRONMENTAL EDUCATION PLATE" to Educate Louisiana's Citizens about our Environment. Your purchase helps to fund Environmental Education grants for educators and students, the annual Environmental Education State Symposium, and other programs designed to further

environmental knowledge and stewardship in Louisiana.

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Order from your car dealer: You can request an Environmental Education Plate from your car dealership upon the purchase of a new/used vehicle.

#### Concurrent Sessions 8:00 a.m. - 8:50 a.m.

#### Yes, You Can Still Teach Science! — Feliciana Room

Presenter: Christy Flynn, South Grant Elementary

Are you finding yourself struggling to get science into your curriculum? Obtain classroom-proven strategies that tie literacy (and some math) skills to science. This will be a hands-on, active session!

Hands-On Grades K-4

#### Our Role in a Litter-Free Louisiana — Lafourche Room

Presenters: Susan Russell and Sarah Kelley, Keep Louisiana Beautiful

Overview of anti-litter, recycling and community-building programs KLB has available for teachers. Learn about the KLB Healthy Communities Grant application process, where teachers can apply for awards of up to \$10,000. See highlights of programs in schools that the grants have funded. Share data and facts regarding litter in Louisiana and how to change people's behaviors through lesson activities provided.

Lesson Demo, Exemplary Program

General (K-12)

#### Biodiversity & Community Based Conservation Around the World — Evangeline Room

Presenter: Brenda Walkenhorst, Audubon Nature Institute

Presenting animals in their native habitats: Brenda Walkenhorst has traveled around the world to study endangered species in their native habitats and the community-based conservation programs that are working to save them. She will show videos and tell stories that help connect the audience to the wildlife that needs their help.

Exemplary Program General (K-12)

#### Gulf of Mexico Toolboxes and Lesson Plans — Bienville Room

Presenters: Pat Stephens Williams, Diane Wetherbee and Rolonda Teal, Stephen F. Austin State University

Come learn about the NPS/Gulf of Mexico toolboxes and lesson plans! These boxes are Gulf Coast and state specific for use by both formal and informal educators. Boxes are self-contained with lots of cool projects and props, and will work together well with materials and sites you have available for use. Session attendees will learn about contents, use and availability!

Hands-On, Lesson Demo

Grades 5-8

#### Where Do All the Toxins Go? — Acadia Room

Presenters: Kelli Palmer and Maud Walsh, Louisiana State University

This activity explores the concepts of bioaccumulation and biomagnification of contaminants in an aquatic food chain and the resulting effects on ecosystems. Through role play, participants will explore the process of biomagnification, experience how organisms are exposed to toxic chemicals, and determine which organisms in the food chain accumulate the greatest concentration of chemicals in their tissues.

Hands-On, Lesson Demo

Grades 5-8, 8-12

#### Now In My Backyard (NIMBY) — Orleans Room

Presenters: Dave Marschall and Dr. Paula Willis, Runnels High School

Biodiversity might be anywhere. Biology teachers and students can find relevant examples of ecological principles as well as examples of various plants, animals, and fungi in their own back yards. This idea will be explored with reference to everyday opportunities with the expectation that teachers will be able to design lessons that suit their particular grade levels and environments.

Lesson Demo Grades 8-12

**Keynote Speaker & Recognitions** 

Salons I & II

9 a.m. -10 a.m.

#### Concurrent Sessions 10:00 a.m. - 10:50 a.m.

#### **Explore PK-2 Environmental Resources!** — Feliciana Room

Presenter: **Brenda Nixon**, Gordon A. Cain Center for Scientific, Technological, Engineering and Mathematical Literacy Your students will enjoy learning about the environment and environmental stewardship through play, stories, games, and other fun stuff! Especially tailored to meet needs of young learners, this workshop will include multiple ways to actively engage students in learning important environmental concepts and ways they can play a part in conserving our resources and keeping Earth clean and healthy. This workshop will be presented throughout the day so you have more options on when to attend. It will also be interactive — we want you to share your great ideas with your colleagues! **Grades PreK-2** 

#### A Light, A Lake and A Coast — Lafourche Room

Presenter: JoAnn Burke, Lake Pontchartrain Basin Foundation

Come see what LPBF's New Canal Lighthouse in New Orleans has to offer. This unique field trip opportunity features the only working lighthouse in Louisiana that houses a museum. See role plays, water quality activities and coastal activities kids can do. Hear how a nearby marsh provides an extension program.

Hands-On General (K-12)

#### **Best Practices in Achieving EE Through Curriculum Integration** — Evangeline Room

Presenter: Jean-Marie Williams, Oaks Montessori

Oaks Montessori School in Hammond has recently incorporated a plan to develop purpose-driven, discovery-based learning opportunities allowing students ages 3-12 the chance to scaffold on pre-existing knowledge in environmental education. We will share the best practices we have encountered thus far and specific activities we have found effective in each content area.

Hands-On, Lesson Demo, Exemplary Program

Grades PreK-4, 5-8

#### **Visualizing Combustion & Particulate Matter Pollution** — Bienville Room

Presenters: John Young and Brittany Dupre, Louisiana State University

Although often invisible to the naked eye, particulate matter pollution can have a significant effect on human health. This presentation will provide educators with three engaging activities for students to visualize incomplete combustion, smog and particulate matter.

Hands-On, Lesson Demo

Grades 5-8

#### Renewable Energy — Acadia Room

Presenters: Colleen Richard and Pauline Vidrine, St. Landry Parish School System

Bringing renewable resources into your classroom can be quite challenging! Engage your students with three activities involving models to represent solar energy, water energy, and wind energy. In these activities, students design experiments which enable them to identify and analyze the environmental impact of these three valuable renewable resources.

Hands-On Grades 5-8, 8-12

#### Rx For the Coast: Student-Driven Research for Solving Coastal Problems — Orleans Room

Presenters: Dinah Maygarden and Colleen Able, University of New Orleans

This NOAA-BWET funded partnership with Ben Franklin High School in New Orleans has introduced hundreds of students at three schools to coastal science in our local environment. Approximately 50 students completed in-depth research projects answering their questions on coastal topics. We will showcase the best with the help of outstanding students and discuss how you may replicate this project.

Exemplary Program Grades 8-12

#### Concurrent Sessions 11:00 a.m. - 11:50 a.m.

#### **Explore PK-2 Environmental Resources!** — Feliciana Room

Presenter: Brenda Nixon, Gordon A. Cain Center for Scientific, Technological, Engineering and Mathematical Literacy

Repeat of the 10:00 a.m. session

Hands-On Grades PreK-2

#### A Look at Chemistry Behind Air Pollution — Lafourche Room

Presenters: Elisabeth Feld and Cholena Ren, Louisiana State University

Discover unique and creative ways of using Lego bricks to build molecules and show reactions. Get your students (of all grades) to interact while learning about air pollution. Session includes a walk-through demonstration of activities and techniques to make lessons enjoyable for any grade.

Hands-On, Lesson Demo

General (K-12)

#### **Collection Chaos: Assessing Biodiversity for a Population** — Evangeline Room

Presenter: Murt Conover, Louisiana Universities Marine Consortium

Participants will collect "species" from a population and identify them. Data will be collected to calculate the biodiversity and species richness of the population. This Hands-On activity will include learning about population size estimates and catch & release methods. This activity can easily be replicated in the classroom.

Hands-On Grades K-4

#### Native Fish in the Classroom + WETSHOP — Bienville Room

Presenters: Angela Capello and MattiLynn Delatte, Louisiana Department of Wildlife and Fisheries

<u>Native Fish in the Classroom:</u> Connect students to Louisiana's natural resources and their watersheds with Native Fish in the Classroom. Students raise the native paddlefish from eggs to fingerlings and release them in a suitable riverine habitat. This stewardship initiative provides a constructive, active learning situation where students explore strategies for sustaining aquatic ecosystems.

<u>WETSHOP</u>: Come check out the possibilities that await you this summer. Open to all science and history teachers, WETSHOP provides 55 hours of professional development and numerous wetlands classroom resources. Unearth the extensive bounty of our coast with a week-long wetland workshop that introduces educators to wetland loss, the importance of Louisiana's shores, and restoration efforts.

Lesson Demo, Exemplary Program

Grades 5-8, 8-12

#### Hands-On Curriculum for a Crowded Planet — Acadia Room

Presenter: Sue Ellen Lyons, Holy Cross School

Human population pressures underlie so many environmental issues including climate change, biodiversity loss, water scarcity and pollution. Explore these connections in innovative, interdisciplinary activities that promote critical thinking and problem-solving skills across the middle and secondary curriculum.

Hands-On Grades 5-8, 8-12

#### **Litter Critters on a Shoestring** — Orleans Room

Presenters: Dottie Hartman and Mindy Brooks, LSU Ag Center 4-H Youth Wetlands Program

Explore leaf litter ecology on a budget. Participants will build berlese funnels out of materials typically found in a kitchen trashcan and use them to extract litter critters and study their biodiversity. Take home this action-packed lesson plan for your classroom!

Hands-On Grades 8-12

Exhibitor Showcase Salons III & IV 12 p.m. -12:30 p.m.

Lunch & LEEA Meeting | Salons I & II | 12:30 p.m. -1:30 p.m.

#### Concurrent Sessions 1:30 p.m. - 2:20 p.m.

**Explore PK-2 Environmental Resources!** — Feliciana Room

Presenter: Brenda Nixon, Gordon A. Cain Center for Scientific, Technological, Engineering and Mathematical Literacy

Repeat of the 10:00 a.m. session

Hands-On Grades PreK-2

#### Be Energy Smart - Teaching Energy Efficiency in the Classroom — Lafourche Room

Presenters: Monica Rowand and Robyn Munici, Global Green USA

Be Energy Smart is an in-class energy education program with the purpose of helping students adopt an energy-efficient way of living. In-class lessons and activities teach students about energy efficiency and energy kits help students apply what they learn in school, while engaging parents and guardians in making their homes more energy efficient.

Lesson Demo General (K-12)

#### Sustainability in the Swamp- A Wetland & Urban Water Cycle Education Project — Evangeline Room

Presenters: Melissa Mullins and Nora Schell, Baylor University

Join us as we explore "Sustainability in the Swamp" - which focuses on the sustainable use of water resources in a wetland environment and on an urban water cycle tour with professional development for teachers and field trips for students. Evaluation of the project on teacher attitudes and teaching practices will be discussed. Participants will engage in lively, hands-on activities.

Hands-On General (K-12)

#### Bio Who? Come Find Out What It's All About — Bienville Room

Presenter: Rebecca Holloway, Park Forest Middle School

This session will include a plethora of fun, engaging and exciting activities that your students can participate in to become more aware of sustainability and biodiversity in the classroom. These GLE lessons and related activities are inexpensive and the materials can be easily found in your own home!

Hands-On Grades 5-8

A Replication and Investigation into the Effects of Hurricane Storm Surge on Native Fish Species— Acadia Room Presenters: Dr. David Jouandot II, and students Alex Coppejans, Joshua Jouandot, Mitchell Quebedeaux and Nicolas Chanes, Brother Martin High School

The Behavioral Ecology and Environmental Science Research Team at Brother Martin High School is a student-led laboratory that investigates the physiological stresses experienced by native fish species, both during and after a hurricane-type event. Hurricanes and tropical storms frequently have a substantial ecological effect in Louisiana, often causing a disruption in the salinity levels of inland basins. In the case of Hurricane Isaac, the Barataria Basin experienced fish kills presumably due to storm surge and prolonged rainfall. Students investigate why.

Exemplary Program Grades 8-12

#### Forensic Palynology — Orleans Room

Presenters: Steven Babcock, University Lab School and Mindy Brooks, LSU AgCenter

In this session you will learn about the role of pollen in plant reproduction, pollen morphology and how every ecosystem has its own unique pollen signature. Participants will learn how pollen is used in forensics and receive inquiry-style lesson plans that allow students to integrate Google Earth and NOAA pollen databases to solve a crime.

Hands-On, Lesson Demo Grades 8-12

Grand Door Prize (must be present to win) Salons I & II 2:20 p.m.

# **LEEC Grants Program**

#### The 2015 LEEC Grants application process is currently underway.

Go to http://www.wlf.louisiana.gov/eec for application and additional information.

Deadline: Monday, March 16, 2015.

#### **CONGRATULATIONS TO OUR 2014 GRANT RECIPIENTS.**

EDUCATOR GRANTS									
Project Leader Team Teach		School/ Organization	Project Title						
April Dennis	Perry Fontenot	JS Clark Leadership Academy	Girls Rule Science at School						
Tera Laprarie	Jana Tidwell	Rapides High School	Technology Integration in Science						
Paul LeBlanc		W. Higgins High School	Environmental Inquiry						
Jean-Marie Williams		Oaks Montessori Achieving Environmental Educ School through Curriculum Integration							
PROFESSIONAL DEV									
Project Leader	Agency Affiliatio	n	Project Title						
Jennifer "Murt" Conover	Louisiana Univers	ities Marine Consortium	Biodiversity & Susceptibility of Louisiana Salt Marshes						
Ann Findley	University of Louis	siana at Monroe	Wet in the City: Water as a Focus for Urban Environmental Education						
Stephanie Krouse	Academic Distinct	ion Fund	Reinforcing the Three R's of the Envi- ronment in Pre-K Education: Reduce, Reuse, and Recycle						
Mary Macklin	Berwick High Sch	ool	Extreme Environmental Education						
Diane Madden	Louisiana Tech U	niversity	Conserve the Wetlands						
Heather Kleiner	Sci-Port: Louisian	a's Science Center	Bayou to Bayou Watershed Education Teacher Workshop						
Pauline Vidrine	St. Landry Parish	School Board	Hot Water and Warm Homes from Sunlight						
UNIVERSITY GRANTS	S								
Project Leader	School	Project Title							
Warwick Allen	LSU	Pathogens of introduced ana and implications for h	Phragmites australis genotypes in Louisinost fitness						
Kaci Fisher	LSU AgCenter	Heavy Metal Transport &	Retention in the Lower Calcasieu River						
Songjie He	LSU AgCenter	Three decadal nutrient inputs from coastal rivers in South/ Southwest Louisiana							
Andrew Laughlin	Tulane	Combining deuterium & strontium isotopes to infer breeding origin of Gulf Coast wintering Tree Swallows							
Kathleen Munley	LSU	Investigations into the Effect of Environmental Stressors on Physiological & Behavioral Mechanisms in <i>Fundulus</i> species							
John Young	LSU	Investigation of Potentially Hazardous Fine Particulate Matter in Homes: Designing a Sampler for Citizen Use							
SUSTAINABILITY INI	TIATIVE GRANT								
Project Leader	Organization	Project Title							
Tomeka Prioleaux	Acadiana RC&D	Envirothon							

# **LEEC Environmental Awareness Contest**

#### Sponsored by the Alcoa Foundation

MARK YOUR CALENDAR FOR THE 2015 ENVIRONMENTAL AWARENESS ART & LANGUAGE ARTS CONTEST!

Deadline: Friday, April 24, 2015

2014 Environmental Awareness
Art & Language Arts Contest
Watersheds: From My Back Yard to the Ocean
Sponsored by Alcoa Foundation



THANK YOU to Alcoa Foundation, LEEC members, judges, and others for helping make the 12th Annual Environmental Awareness Art and Language Arts contest a HUGE SUCCESS! Hundreds of entries were received for the 2014 contest, and because of the environmental awareness focus, many teachers took advantage and used this as a classroom learning activity.

The LEEC honored the winners last June at a reception in the Governor's Mansion. The students' families, teachers, and principals were invited to attend the reception. LEEC members and Alcoa Foundation representatives also attended the event and enjoyed conversing with the guests.

All winners received cash prizes and winning entries were used to create the 2015 calendar. Top winners had their works featured on billboards and in newspaper ads in their communities. Thank you, Alcoa, for making all of this possible!

#### CONGRATULATIONS TO OUR 2014 WINNERS & THEIR TEACHERS!

#### <u>Art</u>

#### Group 1

1<sup>st</sup> Place – Brayden Pye, A.E. Philips Lab School, Lincoln 2<sup>nd</sup> Place – Hope Lemoine, St. Aloysius, East Baton Rouge

#### Group 2

1<sup>st</sup> Place – Anna Johnson, Isidore Newman School, Orleans

2<sup>nd</sup> Place – Ashini Modi, South Highlands Magnet, Caddo

3<sup>rd</sup> Place – Isaac Jabaley, Lusher Charter School, Orleans

#### Group 3

1<sup>st</sup> Place – Eduardo Paternostro, Patrick F. Taylor, Jefferson

2<sup>nd</sup> Place – Haley Smith, Choudrant High School, Lincoln

3<sup>rd</sup> Place – Aaron Caldwell, Choudrant High School, Lincoln

#### Group 4

1<sup>st</sup> Place – Maryann Yacoub, Patrick F. Taylor, Jefferson

2<sup>nd</sup> Place – Madeleine Brown, Patrick F. Taylor, Jefferson

3<sup>rd</sup> Place – Amani McWain, Ruston Junior High, Lincoln

#### **Language Arts**

#### Group 1

1<sup>st</sup> Place – Emilee King, Homeschooled, Tangipahoa

2<sup>nd</sup> Place – Arianna Johnson, Sunset Acres, Caddo

3<sup>rd</sup> Place – Ta'Niya Hogan Green, Sunset Acres, Caddo

#### Group 2

1<sup>st</sup> Place – Arch Manning, Isidore Newman School, Orleans

2<sup>nd</sup> Place – Alexis Monistere, John Curtis, Jefferson

3<sup>rd</sup> Place – Owen Brouillette, Homeschooled, West Feliciana

#### Group 3

1<sup>st</sup> Place – Paycen Brouillette, Homeschooled, West Feliciana

2<sup>nd</sup> Place – Lauren Hurst, John Curtis Christian School, Jefferson

3<sup>rd</sup> Place – Aidan Primeaux, St. Margaret Catholic, Calcasieu

#### Group 4

1<sup>st</sup> Place – Shane Strander, St. Paul's School, St. Tammany

2<sup>nd</sup> Place – William Murphy, St. Paul's School, St. Tammany

3<sup>rd</sup> Place – Craig Matise, John Curtis Christian School, Jefferson

# **EXHIBITOR Directory**

#### 4-H Youth Wetlands Program

Ashley Mullens awmullens@agcenter.lsu.edu

#### **Barataria-Terrebonne National Estuary Program**

Alma Jackson alma@btnep.org

#### Biggz Kidz

Zefferino Von Kurnatowski biggzkidz@gmail.com

#### **BREC's Bluebonnet Swamp Nature Center**

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Qualify for the GRAND DOOR PRIZE by turning in your FINAL EVALUATION at the end of the day. You must be present to win.



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# **SYMPOSIUM Notes**

#### THE LEEC NEEDS YOUR INPUT!

PLEASE TURN IN YOUR EVALUATIONS AFTER EACH SESSION AND HAND IN YOUR FINAL SYMPOSIUM EVALUATION AT THE END OF THE DAY!

BY SUBMITTING YOUR EVALUATION, YOU REGISTER FOR THE GRAND DOOR PRIZE TO BE ANNOUNCED AT 2:20 PM. YOU MUST BE PRESENT TO WIN.

# Certificate of Participation

is hereby granted to



for completion of \_\_\_\_\_ hours of Professional Development received during

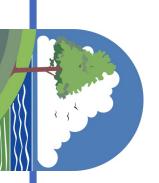


# LOUISIANA ENVIRONMENTAL EDUCATION STATE SYMPOSIUM

OUR ENVIRONMENT . . . OUR FUTURE

February 27-28, 2015

Cole Rucketúhl, Chair Louisiana Environmental Education Commission



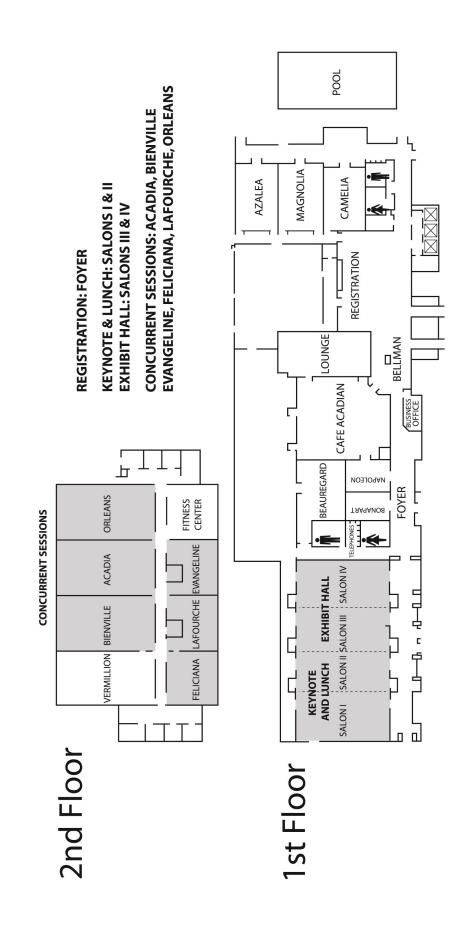
Amy Ouchley, President
Louisiana Environmental Education Association

# 2015 Symposium Planner / CLU Organizer

DATE	TIME	SHORT COURSE TITLE	Presenter Initials
Friday, FEB 27			
DATE	TIME	SESSION TITLE	Presenter Initials
	7:00 AM- 8:00 AM	REGISTRATION & EXHIBIT HALL OPENS	
S A	8:00 AM- 9:00 AM		
Т	9:00 AM- 10:00 AM	KEYNOTE ADDRESS	
U R	10:00 AM- 11:00 AM		
D A	11:00 AM- 12:00 PM		
Y	12:00 PM- 12:30 PM	EXHIBITOR SHOWCASE	
FEB 28	12:30 PM- 1:30 PM	LUNCH & LEEA MEETING	
	1:30 PM- 2:30 PM		

This planner is provided for participants who need documentation of attended sessions. Participants must request that the presenter initial this form at the end of each session. CLUs are not awarded for visiting the exhibit hall. Friday Short Course sessions are set at 7 CLUs. Saturday concurrent sessions and the keynote address are set at a total of up to 5 CLUs for the day's events. Districts have the option to accept this documentation.

# BATON ROUGE Marriott Floorplan



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	PM	1:30 PM - 2:20	11:00 AM 11:50 AM					10:00 AM - 10:50 AM				8:00 AM 8:50 AM			
	Hands-On Grades PreK-2	Explore PK-2 Environmental Resources!	Brenda Nixon Gordon A. Cain Center		Hands-On Grades PreK-2	Explore PK-2 Environmental Resources!	Brenda Nixon Gordon A. Cain Center	Hands-On Grades PreK-2	Explore PK-2 Environmental Resources!	Brenda Nixon Gordon A. Cain Center		Hands-On Grades K-4	Yes, You Can Still Teach Science!	Christy Flynn South Grant Elem.	FELICIANA
	Lesson Demo General (K-12)	Be Energy Smart - Teaching Energy Efficiency in Classroom	Monica Rowand Global Green USA	12 p.m 12:30 p.m.	Hands-On, Lesson Demo General (K-12)	A Look at Chemistry Behind Air Pollution	Elisabeth Feld LSU	Hands-On General (K-12)	A Light, A Lake and A Coast	JoAnn Burke LPBF		Lesson Demo, Exemplary Program General (K-12)	Our Role in a Litter- Free Louisiana	Susan Russell KLB	LAFOURCHE
2:20 p.m. Grand Door Prize Draw	Hands-On General (K-12)	Sustainability in the Swamp	Melissa Mullins Baylor University	Exhibitor Showcase —	Hands-On Grades K-4	Collection Chaos: Assessing Biodiversity for a Population	Murt Conover LUMCON	Hands-On, Lesson Demo, Exemplary Prog. Grades K-4, 5-8	Best Practices in Achieving EE thru Curriculum Integra.	Jean-Marie Williams Oaks Montessori	9 a.m 10 a.m. Keynote & Recogni	Exemplary Program General (K-12)	Biodiversity & Conservation Around the World	Brenda Walkenhorst Audubon Nature Institute	EVANGELINE
Prize Drawing	Hands-On Grades 5-8	Bio Who? Come Find Out What It's All About	Rebecca Holloway Park Forest Middle	12:30 –1:30 p.m. Lunch & LEEA Meeting	Lesson Demo, Exemplary Grades 5-8, 8-12	Native Fish in the Classroom + WETSHOP	Angela Capello LDWF	Hands-On, Lesson Demo Grades 5-8	Visualizing Combstn. & Particulate Matter Pollution	John Young LSU	e & Recognitions	Hands-On, Lesson Demo Grades 5-8	Gulf of Mexico Toolboxes & Lesson Plans	Pat Stephens Williams Stephen F. Austin Univ.	BIENVILLE
	Exemplary Program Grades 8-12	A Replication & Invest. into the Effects of Hurricane Storm	Dr. David Jouandot II Brother Martin HS	EEA Meeting	Hands-On Grades 5-8, 8-12	Hands-On Curriculum for a Crowded Planet	Sue Ellen Lyons Holy Cross School	Hands-On Grades 5-8, 8-12	Renewable Energy	Colleen Richard St. Landry Sch. Sys.		Hands-On, Lesson Demo Grades 5-8, 8-12	Where Do All the Toxins Go?	Kelli Palmer LSU	ACADIA
	Hands-On, Lesson Demo Grades 8-12	Forensic Palynology	Steven Babcock University Lab School		Hands-On Grades 8-12	Litter Critters on a Shoestring	Dottie Hartman LSU Ag Center 4-H	Exemplary Program Grades 8-12	Rx For Coast: Student- Driven Research for Solving Coastal Prob.	Dinah Maygarden UNO		Lesson Demo Grades 8-12	Now In My Backyard (NIMBY)	Dave Marschall Runnels HS	ORLEANS